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ABSTRACT

To assess whether black children comprehend more of high- than low-interest reading material, whether the performance discrepancy between white and black children is reduced under high-interest conditions, and to determine the degree of similarity of the interests of white and black children, a study involving 33 black and 33 white fifth graders was conducted. Twenty-five color slides covering a wide range of topics were used to assess interest. The reading comprehension phase of the experiment involved the use of a set of encyclopedia passages, half of which corresponded to the child's least preferred topics. Results indicated that black children comprehended more of high- than low-interest material. White children's performance was similarly influenced by the interest level of material; the gap between white and black children's performance was not reduced under the high-interest condition. Analysis of children's topic preferences indicated considerable cross-race similarity of interests, a finding which cautions against overestimating the uniqueness of black children's interests when selecting reading material for them. (Author/FL)

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CENTER FOR THE STUDY OF READING

Technical Report No. 99

INFLUENCE OF TOPIC INTEREST ON BLACK CHILDREN AND WHITE CHILDREN'S READING COMPREHENSION

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Influence of Topic Interest on Black Children and White Children's Reading Comprehension

Black children's reading achievement test performance is typically found to be lower than white children's performance. Furthermore, the performance discrepancy increases as children grow older (e.g., Coleman et al., 1966; Singer, Gerard, & Redfearn, 1975). By the fifth- or sixth-grade level, black children have been found to score about a year and a half to two years behind white children. Research attempting to understand this phenomenon has generally focused on cognitive skills such as language ability or decoding ability. However, it is clear that other factors contribute to black children's lower test performance. For example, Zigler, Abelson, and Seitz (1973) have found that economically disadvantaged black children's test performance is particularly influenced by familiarity with the test situation and prior opportunity to interact with the tester.

One potentially relevant variable that has received little research attention is the interest level of the topics children are given to read. Content analyses of school reading material suggests that much of it would be of low interest to children (Zimet, 1972). There is also impressionistic evidence that black children's reading performance is facilitated by high-interest material (Daniels, 1971). However, no formal studies have been made of black children's performance on reading material which is uniquely matched to each child's high- and low-interest areas.

The extent to which material is interesting to children likely has motivational and cognitive implications. First, children may attend more carefully or work harder at comprehending a passage which is appealing. Second, children may have more adequate vocabulary and more elaborate or differentiated schemata with respect to topics that they are interested in. These processes could lead children to perform better on high- than low-interest material.

The major purpose of the present research was to learn whether black children comprehend more of high- than low-interest material and whether the gap in performance between black and white children narrows on high-interest material. The basic research strategy (Asher & Markell, 1974) was to assess each child's interests and then to assign reading material which uniquely corresponded to each child's high- and low-interest areas. Measures of children's comprehension and enjoyment of the material were then obtained.

It would have been desirable, in the present study, to classify children by social class as well as race. However, social class information about individual children was not available. Social class differences were minimized somewhat by choosing schools within integrated neighborhoods rather than schools where integration was achieved primarily by busing, and by sampling an equal number of white and black children from each classroom. Still, given the social class distribution in the city where the study was conducted, black and white children probably differed in their average social class level. Performance differences between white and black children should be understood in this context.

In addition to studying reading comprehension, the present study compared black and white children's interests and boys' and girls' interests. Previous analyses of children's interest ratings of the photographic slides indicates that boys' and girls' interests are essentially independent of one another, that boys' interests are strongly correlated with masculine sex-typing, and that girls' interests are moderately correlated with feminine sex-typing (Markell & Asher, Note 1). It is expected that black and white children will show the same pattern of relationship between interest and sex-typing. Furthermore, it is expected that the correlation of blacks' interests and whites' interests within sex will be far stronger than the correlation of boys' and girls' interests within race. This prediction is based on the assumption that children of the same sex, regardless of race, have more similar socialization histories with respect to interests than children of the opposite sex but the same race.

Method

Subjects

The study was conducted in a medium-sized midwestern city. Fifth-grade children were selected to participate because white and black children's reading scores typically differ considerably at this grade level. Children were from seven classrooms in three different schools. In each classroom all of the black children were selected and an equal number of white children, matched for sex, were randomly sampled. This procedure resulted in a total of 66 children, 19 white females, 19 black females, 14 white males, and 14 black males.

Achievement test data from the school-administered Scholastic Testing Service Educational Development Series reading achievement test were available for 62 of the 66 children. A Race x Sex analysis of variance on the scores indicated that boys and girls had similar scores, $F(1,58) = < 1$, but that blacks and whites had significantly different scores, $F(1,58) = 10.79$, $p < .01$. Race and sex did not significantly interact, $F(1,58) = < 1$. The grade equivalent scores provide an estimate of the magnitude of the difference between whites and blacks. White children had an average grade equivalent score of four years, eight months on the standardized test. Black children had an average grade equivalent score of three years, four months on the standardized test. Thus, the sample shows the pattern of lower reading achievement among black children typically found on standardized tests.

Materials

The materials were those used by Asher and Markell (1974). Twenty-five color slides were used to assess children's interests. Each photographic slide represented a single topic and the topics covered a wide range of interest areas. The topics are listed in Table 3 in the randomly selected order in which they were presented to children. Twenty-five passages from the Britannica Junior Encyclopedia (1970) were used in the reading comprehension phase of the experiment. This source was originally selected because it provides a wide range of topics in a more consistent style than would be obtained from diverse sources. The passages corresponded in topic to the 25 slides. Each passage was transformed into a

ten-item cloze passage (Taylor, 1953) by deleting the tenth word and every fifth word thereafter. An entire sentence followed the last deletion. Each deletion was replaced with a 20-space line on which children could print their replacements. The cloze procedure was used as a measure of reading comprehension because it is reliable, correlates highly with standardized reading achievement test scores (Bormuth, 1967, 1968; Rankin & Culhane, 1969), and provides objective and replicable procedures for creating test items on any sample of prose material.

Procedure

The interest assessment and the reading comprehension task were administered in two separate sessions two weeks apart. The children were tested in their classrooms. Different experimenters administered the two sessions so that children would not perceive the connection between the interest assessment and the reading activity. All children in the seven classrooms participated even though the only data of interest were from the sample of 33 black and 33 white children. Testing of all children was done to avoid the potentially reactive effects of testing all of the black children but only some of the white children in each class.

Interest assessment. Experimenter 1 told the children, "I'd like to find out about what kids are interested in. I'm going to show you 25 slides. For each slide I'd like you to mark, on the sheet we'll give you, how interesting the picture is to you. Who knows what 'interesting' means?" After a few children had responded, Experimenter 1 summarized their comments by saying, "So, something is interesting when you like it

and would like to find out more about it." Experimenter 1 then handed each child a form with twenty-five 1-7 rating scales, and drew a 1-7 scale on the blackboard. At the low end of each scale were the words "not at all interesting", and at the high end were the words "very interesting." The nature and use of the rating scale were explained:

> If a picture is very interesting to you--if you like it very much and want to know more about it--mark a number at this end of the scale. (The experimenter pointed to the Numbers 5, 6, and 7 of the scale.) If a picture is not at all interesting to you--if you don't like it and wouldn't care to find out more about it--mark a number at the low end of the scale. (The experimenter pointed to the Numbers 1, 2, and 3 of the scale.) If the picture is of medium interest to you-- if you like it but don't like it a lot--mark a number here. (The experimenter pointed to Numbers 3, 4, and 5.) Let's try an example for practice. If I showed a picture of a pile of dollar bills, what number would you choose? (The experimenter called on several students.) If I showed a picture of a piece of dirt, what number would you choose? (The experimenter again called on several students.) So you can see that different people are interested in different things. If anyone has any questions raise your hand and I'll try to answer them. (Experimenter 1 then presented the slides

announcing the number of each one as it was projected.) Here's Picture 1... Here's Picture Number 2..., etc.

The slides were presented at the rate of approximately one every 10 seconds. When all slides had been rated, the children were asked to write their names on their rating sheets.

Reading comprehension task. Two weeks after the interest assessment, Experimenter 2 gave each child six passages to read. Three of the passage topics corresponded to a child's three highest interest ratings and three to his or her three lowest interest ratings. When slides shared the third highest or lowest rating, topics were randomly selected from those sharing equal ratings. Each of the six passages, appropriately titled in primary type, upper-case letters was mimeographed on 8½ x 11 inch paper and enclosed in a legal size envelope. The envelopes were numbered from one to six to specify the order in which passages should be read. Half of the children within each race and sex group, randomly selected, read the passages in a high-low-high-low-high-low interest sequence. The other half of the children read them in a low-high-low-high-low-high interest sequence. The particular positions of the three high- and three low-interest passages within these two arrangements were randomly determined.

In addition to these six envelopes, each child received a seventh envelope which contained six reading preference rating scales. Each scale required children to indicate from one to seven how much they would like to read more about a particular topic they had just read. This served to assess the validity of the picture-rating technique for

boys and girls and for blacks and whites. If the technique is valid then children should prefer the passages corresponding to their highly rated pictures.

Before the children were given the envelopes, Experimenter 2 gave the following instructions:

> I am going to show you a reading game. (Experimenter 2 gave each child a sample paragraph.) This is a paragraph with some words missing. The idea is to read the paragraph and decide what words are missing. Each paragraph has 10 missing spaces. Take a minute to look at the paragraph. (The experimenter paused.) OK. Now I'll read the paragraph with all of the words in it. You follow along with me. (The experimenter read the sample paragraph aloud, collected the sample paragraph from each child and then gave each child the test envelopes.)
>
> You now have seven envelopes. Six have paragraphs in them. Start with the first paragraph and try to fill in the missing words. When you are done with a paragraph, put it back in the envelope and put it aside on your desk. Then you can go on to the second envelope; then the third, fourth, fifth, and sixth. Once you put a paragraph in the envelope you can't go back. Do you have any questions?
>
> OK. Read each paragraph carefully and try to fill in the missing words. I can't help you read any of the words, but if

you have trouble spelling any words raise your hand and I will help. Spelling doesn't count in this game. If you are having trouble don't get stuck. Go on to the next part of the paragraph or a new paragraph. You have 40 minutes for the six paragraphs. That should be plenty of time. Any questions?

When you are done with the six paragraphs, open the seventh envelope. It contains some questions about how much you want to read more about each of the topics. If you would like to read more about it, circle one of the high numbers. If you wouldn't like to read more about it, circle one of the low numbers. You can circle one of the numbers in the middle if that's how you feel. Got the idea? Any questions? OK. You can begin.

When each child was finished, Experimenter 2 collected the material and unobtrusively recorded the time. The average time for completing the task was nearly 19 minutes. Black and white children took similar amounts of time, $F(1,62) = < 1$, and girls took longer than boys, $F(1,62) = 8.55$, $p < .01$. The interaction of race and sex was not significant, $F(1,62) = 1.88$.

Results

Picture Ratings

It is important that the pictures provide both interesting and uninteresting topics for each race and sex group. For each child, the

highest possible combined rating for his or her three most interesting pictures is 21. The lowest possible combined rating for his or her least interesting pictures is 3. The average combined rating on the three highest rated pictures was 20.8 for white males, 20.9 for white females, 20.9 for black males, and 20.9 for black females. The differences are small and non-significant, $F(3,62) = < 1$. The average combined ratings on the three lowest rated pictures was 4.92 for white males, 3.84 for white females, 3.87 for black males and 4.05 for black females. These differences, too, are non-significant, $F(3,62) = < 1$. Thus, the pictures provided very interesting and very uninteresting topics for black and white children and for boys and girls.

Preference Ratings

The picture assessment technique, if valid for both races and sexes, should lead to the selection of topics for children that they find appropriately interesting or uninteresting. Given three 1-7 rating scales for high-interest material and three 1-7 scales for low-interest material, the reading preference scores could range from 3 to 21 for each level of interest. Table 1 presents the data on children's desire to read more about their high- and low-interest topics after having read all six passages.

Insert Table 1 about here

A 2 x 2 x 2 (Race x Sex x Interest) analysis of variance on children's post-reading preference ratings yielded no significant effects of race, $F(1,62) = < 1$, or sex, $F(1,62) = < 1$. Thus blacks and whites, and boys and

girls, gave similar ratings overall. As expected there was a highly significant effect of interest, $F(1,62) = 102.34$, $p < .001$. Children strongly preferred the high-interest material. None of the two-way interactions, Race x Sex, $F(1,62) = < 1$, Race x Interest, $F(1,62) = < 1$, or Sex x Interest, $F(1,62) = < 1$, were significant. There was a significant three-way, Race x Sex x Interest interaction, $F(1,62) = 5.62$, $p < .05$. This occurred because the difference between children's high- and low-interest ratings was smaller for white females and black males than for the other two groups. Still, all four groups showed considerable preference for the material associated with high-interest topics.

Cloze Scores

Children received cloze scores based on the number of deleted words correctly supplied. Responses were considered to be correct despite spelling errors if the supplied word was clearly recognizable as the deleted word.[2] Given three high-interest and three low-interest passages and 10 deletions per passage, cloze scores could range from 0-30.

Table 2 presents data on children's cloze performance. It can be seen that black children and white children did better on high- than low-interest material. A 2 x 2 x 2 (Sex x Race x Interest) analysis of variance performed on these data indicated a significant effect of race, $F(1,62) = 9.03$, $p < .01$, and a non-significant effect of sex, $F(1,62) = < 1$. These data parallel the findings from the children's school-administered achievement test. Whites attained higher scores than blacks, and boys and girls did not differ.

Of particular concern are possible effects of interest on children's reading comprehension. The effect of interest on cloze performance was significant, $F(1,62) = 12.98$, $p < .01$; children read better on high- than low-interest material. There were no significant interactions between race and sex, $F(1,62) = < 1$, race and interest, $F(1,62) = < 1$, or sex and interest, $F(1,62) = < 1$. The three-way interaction of race, sex and interest was also non-significant, $F(1,62) = < 1$. Thus, the effect of interest was similar across all four groups of children.

Insert Table 2 about here

Children's Interests

An additional purpose of this experiment was to compare children's interests across race and across sex, and to examine the extent to which each group's interest ratings were sex-typed. As in Markell and Asher (Note 1) each of the 25 pictures was given an interest score based on the average rating that the picture received from each group of children.[3] Table 3 presents the average rating each picture obtained from black males, black females, white males, and white females. For each group, some pictures are highly rated, others are rated rather low, and most are in the middle of the 7-point scale.

Insert Table 3 about here

Table 4 presents the correlation of each group's interest ratings with each other group. White males and black males gave similar ratings,

$r(23) = .62$, $p < .01$, and white females and black females gave similar ratings, $r(23) = .46$, $p < .05$. The correlation for white males and white females was $r(23) = -.03$, ns, and the correlation for black males and black females was $r(23) = .27$, ns. Thus, there was considerable similarity of interests among children of the same sex and different race, but little similarity across sex within the same race.

Insert Table 4 about here

The next set of analyses were performed to assess the degree to which each group's interest ratings were related to traditional concepts of masculinity and femininity. In order to correlate children's interests with sex-typing, an estimate was needed of the degree to which each of the 25 pictures is sex typed. Markell and Asher (Note 1) had 30 fifth grade students and 36 college students judge the pictures. Half of the students rated the pictures on a 7-point "not masculine" to "masculine" scale and half on a 7-point "not feminine" to "feminine" scale. Ratings were found to be very highly correlated between male and female judges, and between children and adult judges (the correlations ranged from $r = .87$ to $r = .98$). Accordingly, ratings were averaged across all judges by Markell and Asher to yield a single masculinity score and a single femininity score for each picture. These scores were used here to assess the relationship between the masculinity and femininity scores of each picture and children's interest ratings of each picture.

Table 5 presents the relevant correlations. The interest ratings of boys of both races were highly correlated, positively, with masculine sex-

typing and moderately correlated, in a negative direction, with feminine sex-typing. The interest ratings of girls of both races were moderately correlated positively with feminine sex-typing and negatively correlated, but non-significantly, with masculine sex-typing. Thus, the pattern of relationship between interest and sex-typing was quite similar for black children and white children.

Insert Table 5 about here

Discussion

The effect of interest on reading comprehension was similar for white and black children. Both groups' performance was facilitated by being given material with individually appealing topics. That black children read better on high-interest material is encouraging in light of the reading material employed here. All passages were from the Britannica Junior Encyclopedia, a source which contains a rather dry expository style, has many complex sentences, and uses many difficult and unfamiliar words. Indeed, it is difficult to conceive of a better representative of standard dialect material. The effect of interest in this experiment contrasts with evidence that transforming reading passages into non-standard dialect seems to have little influence on black children's reading comprehension (Hall & Turner, 1974; Nolen, 1972).

Although black children did better on high-interest than low-interest passages, the performance difference between blacks and whites remained the same. Black children enjoyed the high-interest material as much as white

children yet still comprehended it less. There are a variety of reasons why this might occur. Black children may have had fewer decoding skills, less background knowledge about the topics, or, based on previous failure in test situations, less confidence that making an effort would have much pay off. Further research is needed to establish whether there are certain conditions under which interesting material has stronger effects for blacks than whites.

The present study also provided data concerning the effect of interest on boys' and girls' performance. Asher and Markell (1974) found that boys were strongly influenced by the interest level of the material but that girls were minimally affected. In the present study, however, girls as well as boys achieved higher scores on high- than low-interest material. Further research is needed to establish the conditions under which the interest effect is obtained for both sexes rather than for boys only. For now, it appears that the effect of interest may be broader than originally found.

A second purpose of the present research was to compare children's interests across race and sex and to examine the extent to which children's interests were related to traditional sex-role standards. The data for boys and girls replicated earlier findings (Markell & Asher, Note 1). First, boys' picture ratings and girls' picture ratings were not correlated with one another. Second, boys' interests were highly correlated with masculine sex-typing and negatively correlated with feminine sex-typing. Third, girls' interests were moderately related to feminine sex-typing and only somewhat negatively related to masculine sex-typing. The general pattern, then, is that boys' interests are quite sex-typed and girls' interests are moderately sex-typed.

The data with respect to race indicate a considerable degree of overlap in interests among black and white children. Black males' and white males' interests were significantly correlated. Black females' and white females' interests were also significantly correlated although the degree of relationship was somewhat less. These results imply a considerable similarity of socialization experiences among children of the same sex but of different races. These data also have relevance to the design and selection of reading material for black children. Recent attempts to create materials for black children may be overestimating the uniqueness of black children's interests and underestimating the extent to which black children have interests in common with white peers of the same sex.

Reference Note

1. Markell, R. A., & Asher, S. R. The relationship of children's interests to perceived masculinity and femininity. Paper presented at the annual meeting of the American Educational Research Association, Chicago, March 1974.

References

Asher, S. R., Hymel, S., & Wigfield, A. Influence of topic interest on children's reading comprehension. Journal of Reading Behavior, in press.

Asher, S. R., & Markell, R. A. Sex differences in comprehension of high- and low-interest material. Journal of Educational Psychology, 1974, 66, 680-687.

Bormuth, J. R. Comparable cloze and multiple-choice comprehension test scores. Journal of Reading, 1967, 10, 291-299.

Bormuth, J. R. Empirical determination of the instructional reading level. Proceedings of the International Reading Association, 1968, 13, 716-721.

Britannica Junior Encyclopedia. Chicago: Encyclopedia Britannica, 1970.

Coleman, J. S. et al. Equality of educational opportunity. Washington, D. C.: U. S. Government Printing Office, 1966.

Daniels, S. How 2 gerbils, 20 goldfish, 200 games and 2000 books, and I taught them how to read. Philadelphia: Westminister Press, 1971.

Hall, V. C., & Turner, R. R. The validity of the "different language explanation" for poor scholastic performance by black students. Review of Educational Research, 1974, 44, 69-81.

Nolen, P. S. Reading nonstandard dialect materials: A study at grades two and four. Child Development, 1972, 43, 1092-1097.

Rankin, E. F., & Culhane, J. W. Comparable cloze and multiple-choice test scores. Journal of Reading, 1969, 13, 193-198.

Singer, H., Gerard, H. B., & Redfearn, D. Achievement. In H. B. Gerard & N. Millers (Eds.) School desegregation. New York: Plenum, 1975.

Taylor, W. L. "Cloze procedure": A new tool for measuring readability. Journalism Quarterly, 1953, 30, 415-433.

Zigler, E., Abelson, W. D., & Seitz, V. Motivational factors in the performance of economically disadvantaged children on the Peabody Picture Vocabulary Test. Child Development, 1973, 44, 294-303.

Zimet, S. G. What children read in school. New York: Grune and Stratton, 1972.

Footnotes

[1]See Asher and Markell (1974) for a detailed discussion of these points.

[2]Following Asher, Hymel and Wigfield (in press) an analysis was made in which children were also given credit for producing synonyms of the correct response. This resulted in only slight increases in children's average cloze scores and did not alter any of the findings. Accordingly, the data presented here are based on the more traditional exact replacement scoring method.

[3]There were 14 males of each race and 19 females of each race. Given the larger sample of females, the average picture ratings from females could be more reliable. To check this, all correlations presented here were also calculated based on a random sample of 14 black females and 14 white females. The resulting correlations were quite similar. Accordingly, the data presented here are based on the ratings received from the entire sample of 19 black females and 19 white females.

Table 1

Reading Preference Ratings of High- and Low-Interest Material

	Interest Level	
Group	High	Low
White		
Male	16.71	9.21
Female	14.79	10.26
Black		
Male	14.79	10.36
Female	17.11	10.11

Table 2

Cloze Scores on High- and

Low-Interest Material

	Interest Level	
Group	High	Low
White		
Male	7.71	6.36
Female	8.42	6.42
Black		
Male	5.21	3.29
Female	5.47	4.21

Table 3

Average Interest Rating of Each Picture by Each Group

Topic	White Males	Black Males	White Females	Black Females
1. Forest	4.00	2.36	3.68	2.74
2. Jet airplane	4.93	6.14	3.68	3.79
3. Priest	3.57	3.36	5.11	5.26
4. Dog	4.57	5.07	6.05	4.16
5. Astronaut	5.36	5.43	4.47	4.79
6. Bride	2.07	4.57	4.63	5.79
7. Calf	4.71	3.43	4.68	4.32
8. Basketball players	6.21	5.50	3.58	4.21
9. Butterflies	4.21	4.00	5.42	5.16
10. Marionettes	4.00	3.71	4.42	5.58
11. Monkey	3.64	2.79	4.53	4.00
12. Flowers	3.71	2.86	4.63	3.89
13. Bullfighting	5.71	5.21	5.05	4.47
14. Skiing	5.50	5.14	4.63	5.79
15. Food	5.86	6.71	5.16	6.89
16. Living room	3.57	4.07	3.63	5.47
17. Map	4.50	2.93	2.32	3.53
18. Painting	5.00	4.00	4.00	5.11
19. Circus	5.29	4.64	5.42	5.58
20. Race cars	6.00	6.00	4.47	3.89
21. Canoe	5.57	3.21	5.11	4.05
22. Model trains	5.00	5.07	2.11	3.37
23. Mother and child	2.21	1.86	5.26	5.53
24. Insect	3.64	2.64	4.63	2.89
25. Cat	5.21	2.93	6.53	5.37

Note: 1 = low interest, 7 = high interest.

Table 4

Correlation of Interest Ratings Between Groups

	White Males	Black Males	White Females	Black Females
White Males		.62**	-.03	-.04
Black Males			-.08	.27
White Females				.46*
Black Females				

* $p < .05$, one tailed.

** $p < .01$, one tailed.

Table 5

Correlations Between Interest and Sex-Typing

	Masculine Sex-Typing	Feminine Sex-Typing
White Males	.81**	-.65**
Black Males	.57**	-.43*
White Females	-.19	.38*
Black Females	-.32	.47**

* $p < .05$, one tailed.

** $p < .01$, one tailed.

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